AMENDMENTS TO THE SPECIFICATION

Page 1, delete the first full paragraph and insert the following paragraph:

The present invention relates to a magnetic tape cartridge and assembling method thereof~~,~~ ~~in~~ and, more particularly,~~particular,~~ to the magnetic tape cartridge assembling method thereof building a door and tensile coil spring in a cartridge case.

Page 1, delete the third full paragraph and insert the following paragraph:

There exist various kinds of cartridges as this kind of magnetic tape cartridge, and in recent~~these~~ years, for the purpose of downsizing a drive unit, a magnetic tape cartridge which is composed so as to form a pulling-out port of a magnetic tape at a corner of side wall of a cartridge case and to open/close the pulling-out port by a curved shape door formed like a laterally long sheet has been~~is~~ developed to make the space of movements of a tape pulling-out mechanism small in the drive unit.

Page 1, delete the fourth full paragraph and insert the following paragraph:

In such the magnetic tape cartridge, in order to open/close the door, ~~it is thought of~~ a structure is contemplated in that: making the door a universally slidable structure and providing the door with a door-side spring hooking portion; providing an inner surface of the cartridge case with a case-side spring hooking portion; always energizing the door toward its closing direction by a tensile coil spring hooked across the door-side spring hooking portion and case-side spring hooking portion; and pushing/moving a protrusion piece for operation formed on an outer surface of the door by an operating arm appended to a loading mechanism, thereby opening the door.

Page 2, delete the first full paragraph and insert the following paragraph:

Then, as a method to automate building-in work of the door and tensile coil spring in the cartridge case in the manufacturing process of magnetic tape cartridge of such the structure, a building-in method which firstly grips the door with a robot hand and sets it in a guide groove, then grips the tensile coil spring with the robot hand, and attaches its one end to the door-side spring hooking portion provided in the door and its other end to the case-side spring hooking portion provided in an inner surface of the cartridge case is contemplated~~thought of~~.

Page 2, delete the second full paragraph and insert the following paragraph:

However, in the building-in method, if the door fitted in the guide groove oscillates and/or slants left/right, a position of the door-side spring hooking portion for the cartridge case displaces, so there exists a problem that ~~attaching~~ work of attaching both ends of the tensile coil spring to the door-side spring hooking portion and the case-side spring hooking portion becomes difficult. Moreover, if a gap between the door and case-side spring hooking portion is narrow, there exists a problem that, in the~~ attaching~~ work of attaching both ends of the tensile coil spring to the door-side spring hooking portion and the case-side spring hooking portion, it becomes difficult to insert the robot hand gripping the tensile coil spring between the door and case-side spring hooking portion. That is, in the building-in method, there exists a problem that the building-in work of the door and tensile coil spring is difficult.

Page 3, delete the first full paragraph and insert the following paragraph:

A magnetic tape cartridge of the invention is characterized by being equipped with a cartridge case comprising~~consisting of~~ an upper half and lower half, a magnetic tape pulling-out port formed at a corner of side wall of the cartridge case, a curved door opening/closing the magnetic tape pulling-out port, a guide groove guiding the door to universally slide in its opening/closing directions, a door-side spring hooking portion protrusively provided with the door, a case-side spring hooking portion formed in an inner surface of the cartridge case, a tensile coil spring, of which one end portion is hooked on the door-side spring hooking portion and the other end portion on the case-side spring hooking portion, always energizing the door to its closing direction, and a spring putting platform ~~on which the tensile coil spring temporary built in the door-side spring hooking portion can be placed~~for receiving said tensile coil spring in a state in which said tensile coil spring is temporarily assembled on said door side spring hooking portion.

Page 3, delete the fourth full paragraph and insert the following paragraph:

Another magnetic tape cartridge of the invention is characterized by being equipped with a cartridge case comprising~~consisting of~~ an upper half and lower half; an opening, which pulls out a magnetic tape, formed at a corner of the cartridge case; a curved-shape door opening/closing the opening; a guide groove, which guides the door to universally slide in its opening/closing directions, formed in an inner surface of the cartridge case; a door-side spring hooking portion provided at the door; a case-side spring hooking portion formed in an inner surface of the cartridge case; and a tensile coil spring, of which one end portion is hooked on the door-side spring hooking portion and the other end portion on the case-side spring hooking portion, always energizing the door to its closing direction, wherein the door-side spring hooking portion is composed of a bar-shaped body protruding toward a farther opening side from an end portion of opening side of the door and a spring putting platform ~~which holds~~for receiving the tensile coil spring on an~~temporary built in the case-side spring hooking portion by receiving with its~~ upper surface ~~is formed~~of the spring putting platform in a state in which said tensile coil spring is temporarily assembled on said case side spring hooking portion formed in an inner surface of said cartridge case.

Page 5, delete the fourth full paragraph and insert the following paragraph:

FIGS. 4A, 4B, 4C, and 4D are perspective views of the first embodiment showing building-in steps of a main portion of door-side spring portion of the slide door shown in FIG. 3: FIG. 4A, a first step; FIG. 4B, a second step; FIG. 4C, a third step; and FIG. 4D, a fourth step.

Page 7, delete the first full paragraph and insert the following paragraph:

In addition, as shown in FIG. 2, a lower end 6b (see FIG. 3) of the slide door 6 is fitted in an inner surface 12 of the lower half 1B, and a curved shallow guide groove 13 guiding the slide door 6 to universally slide in its opening/closing directions during~~in~~ its opening/closing, a case-side spring hooking portion 8, a leader pin holding concave portion 15 holding a lower end of the leader pin L (see FIG. 1) engaged in the disc spring 9 (see FIG. 1), and the like are formed. Although not shown here in the drawings, also in an inner surface of the upper half 1A, the guide groove 13 formed in the inner surface 12 of the lower half 1B, a guide groove corresponding to the leader pin holding concave portion 15, an engaging portion corresponding to the case-side spring hooking portion 8 and a leader pin holding concave portion are formed.

Page 8, delete the second full paragraph and insert the following paragraph:

Meanwhile, a shape of the door-side spring hooking portion 63 is not specifically restricted if it can attach one end of the tensile coil spring 7. Moreover, although the spring putting platform 64 is provided neighboring the door-side spring hooking portion 63, it is not always necessary to be together with the hooking portion 63 and a slight gap may exist between the platform 64 and hooking portion 63.

Page 8, delete the third full paragraph and insert the following paragraph:

Moreover, in the inner surface 6d of the slide door 6, when the door 6 is in a closed state, stoppers 62 holding a lower end of the leader pin L (see FIG. 1) are formed at a front end portion (end portion which becomes~~becoming~~ a closing direction side when building the door 6 in the lower half 1B) 6e of the door 6.

Page 8, delete the fifth full paragraph and insert the following paragraph:

When assembling the magnetic tape cartridge MC, ~~provide on a transport pallet (not shown in the drawings)~~ each component such as the upper half 1A, lower half 1B, reel 2, lock plate 3, compression coil spring 4, release pad 5, slide door 6, tensile coil spring 7, disc spring 9, involuntary deletion preventing claw 10, and cartridge memory 11, is provided on a transport pallet (not shown in the drawings), and in a building-in process of each component, ~~build~~ each component is built in a predetermined position of the lower half 1B (see FIG. 1).

Page 9, delete the third full paragraph and insert the following paragraph:

Next in the third step (see FIG. 4C), place~~near~~ the door 6 near to the guide groove 13 and hook the other end portion 7b of the coil spring 7 in the case-side spring hooking portion 8. Then, grip the door 6 so as to be slanted with respect to~~for~~ the lower half 1B so that a slant of the coil spring 7 becomes same as that of its built-in state.

Page 10, delete the second full paragraph and insert the following paragraph:

If formed like this, the position of the spring 7 is easily determined, for example, even when the spring 7 is moved in a state in which the spring 7 is temporarily assembled on ~~temporary built in~~ the door-side spring hooking portion 63, ~~a fall of~~ the spring 7 can be prevented from falling off during assembly.

Page 10, delete the third full paragraph and insert the following paragraph:

Meanwhile, a shape of the groove 13 includes a concave shape with a cross section of the groove being~~as~~ a V-shape, semi-circle, and the like.

Page 10, delete the sixth full paragraph and insert the following paragraph:

Moreover, when assembling the magnetic tape cartridge MC, it is preferable to assemble so as to include the first step hooking one end portion 7a of the spring 7 in the door-side spring hooking portion 63, the second step placing the spring 7 on the spring putting platform 64, the third step placing~~nearing~~ the door near to the guide groove 13 and hooking the other end portion 7b in the case-side spring hooking portion 8, and the fourth step fitting the door 6 in the guide groove 13 expanding the spring 7.

Page 11, delete the second full paragraph and insert the following paragraph:

In the assembling method of the first embodiment, when placing~~nearing~~ the door 6 near to the guide groove 13 in the third step, it is preferable for the door 6 to be gripped by being slanted with respect to~~for~~ the lower half 1B so that a slant of the spring 7 becomes the same as that of its built-in state.

Page 12, delete the first full paragraph and insert the following paragraph:

In a state in which the slide door 6 is built in the cartridge case 1, the door 6 of which the outer surface 61 convexly curves and the inner surface 62 concavely curves is formed as a sheet-shape. Here, referring to FIG. 7~~together~~, at upper/lower end edges of the slide door 6, protrusions 60 for sliding which universally slidably~~slidablly~~ engage in guide grooves 13 of the upper half 1A and lower half 1B are formed. On the~~an~~ outer surface 61, an operating-use protrusion piece 61a which exposes from an operating-use opening 1E (see FIG. 6) formed in the cartridge case 1 (upper half 1A) to open/close the slide door 6 from outside is formed. In addition, at a front end portion 6e (end portion which becomes~~becoming~~ a closing direction side when built in) of the inner surface 62, a stopper 62a to restrain a leader pin L (see FIG. 6) attached at a top of the magnetic tape MT in a state of the slide door 6 being closed is formed. At a back end portion 6f of the slide door 6, a door-side hooking portion 63 to which the other end of the tensile coil spring 7 is attached is formed. The hooking portion 63 is composed of a bar-shaped body ~~farther~~ extending farther backward from the back end portion 6f.

Page 12, delete the second full paragraph and insert the following paragraph:

Such a~~the~~ slide door 6 is, as shown in FIG. 8, designed to have a structure that the door 6 is always energized in a closing direction by the tensile coil spring 7 attached across the door-side hooking portion 63 and the case-side hooking portion 8 of the lower half 1B, and is pushed in the closing direction as appropriately through the operating-use protrusion piece 61a attached to the slide door 6, thereby opening/closing a magnetic tape pulling-out port 1D of the cartridge case 1.

Page 13, delete the second full paragraph and insert the following paragraph:

A spring putting platform 16, as shown in FIG. 9, protrudes upward from the bottom surface 12 of the lower half 1B, is composed of a platform component ~~long~~ extending lengthwise in one direction along the bottom surface 12, and is disposed at a space between a rib 2a and the guide groove 13 encircling a reel 2 (see FIG. 8). The spring putting platform 16 holds the tensile spring 7 on its upper surface when the spring 7 is hooked across the door-side hooking portion 63 and case-side hooking portion 8.

Page 13, delete the last full paragraph and insert the following paragraph:

A position in which the spring putting platform 16 is disposed is set to be one in which one end port of the groove 16a is opposite to the case-side hooking portion 8. As is clear by also referring to FIG. 10~~ together~~, the expansion/contraction directions of the spring 7 hooked between the door-side hooking portion 63 and case-side hooking portion 8 and the direction in which the groove 16a extends are set to differ. In other words, the platform 16 is disposed at a position where the expanding/contracting coil spring 7 does not fit in the groove 16a, when the spring 7 is hooked between the door-side hooking portion 63 and case-side hooking portion 8.

Page 14, delete the first full paragraph and insert the following paragraph:

Next, an assembling method of a magnetic tape cartridge related to the invention is described referring to FIG. 11. As for the referred to drawing, FIG. 11 is a process drawing showing movements of a robot hand in the case of hooking a tensile coil spring between a door-side hooking portion and case-side hooking portion.

Page 14, delete the third full paragraph and insert the following paragraph:

Firstly, in a predetermined step of a series of assembling processes, the tensile coil spring 7 gripped with the robot hand is transported toward the lower half 1B, thereby one end ring portion 7a of the spring 7 being attached to the case-side hooking portion 8 of the lower half 1B, and the spring 7 is placed on the upper surface of the spring putting platform 16. Then, the robot hand nears the lower half 1B from ~~its~~ above, thereby fitting the ring portion 7a of the spring 7 ~~fitting~~ in the case-side hooking portion 8, and the transport movement is controlled so that a middle portion of the spring 7 can be received in the groove 16a of the platform 16. Thus, the spring 7 transported by the robot hand, as shown in FIG. 9, is positioned at a predetermined position of the lower half 1B because the ring portion 7a of the spring 7 is supported with the case-side hooking portion 8 and the spring 7 is regulated in a lateral swing by being held with the platform 16.

Page 15, delete the first full paragraph and insert the following paragraph:

Next, as shown in FIG. 11, a robot hand RH grips the slide door 6 so that the door 6 maintains a vertical posture directing the door-side hooking portion 63 downward, and transports the door 6 above the spring 7. And the robot hand RH starts to move down when the door-side hooking portion 63 reaches above the ring portion 7b formed at the other end of the spring 7. Then, when the door-side hooking portion 63 is inserted in a ring of the ring portion 7b, the robot hand RH rotates the slide door 6 in a horizontal direction so that the hooking portion 63 scoops up~~scoop~~ the ring portion 7b. Then the door 6 changes its posture to become horizontal expanding the spring 7.

Page 15, delete the second full paragraph and insert the following paragraph:

On the other hand, the robot hand RH performs, paralleling such the movement to change the posture of the door 6, a transport movement to transport the door 6 above the guide groove 13. And when the door 6 reaches above the groove 13 and becomes horizontal, it is fitted in the groove 13 by the robot hand RH moving down. Then, after the building-in process of the door 6 finishes, other predetermined components are built in, whereby the assembling processes of the magnetic tape cartridge are finished~~finish~~.